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WE, GEORGE Y. WU and CATHERINE H. WU, citizens of the United States, both having a post office address at 52 Ridgebury Road, Avon, Connecticut, 06001, have made an invention in

PROPAGATION OF HUMAN HEPATOCYTES IN NON-HUMAN ANIMALS

of which the following is a

SPECIFICATION

[0001] The subject matter herein was generated at least in part under National Institute of Diabetes and Digestive and Kidney Diseases ("NIDDK") Grant No. DK-42182, such that the United States Government has certain rights herein.

[0002] This patent application is a continuation-in-part of International Patent Application No. PCT/US00/05713 filed March 3, 2000 and published in English, which claims priority as a continuation-in-part of United States Patent Application No. 09/431,901 filed November 2, 1999, now U.S. Patent No. 6, 525, 242.

1. INTRODUCTION

[0003] The present invention relates to the propagation of human hepatocytes in the livers of non-human animals that have been tolerized to the human cells. Such animals provide an <u>in vivo</u> model system of the human liver that may be used in toxicology assays and in the study of human liver diseases, including the various forms of hepatitis (in particular hepatitis B and C) and alcohol - induced liver degeneration. They may also be used as a source of human hepatocytes for reconstitution of liver tissue, thereby providing an alternative to liver transplantation.